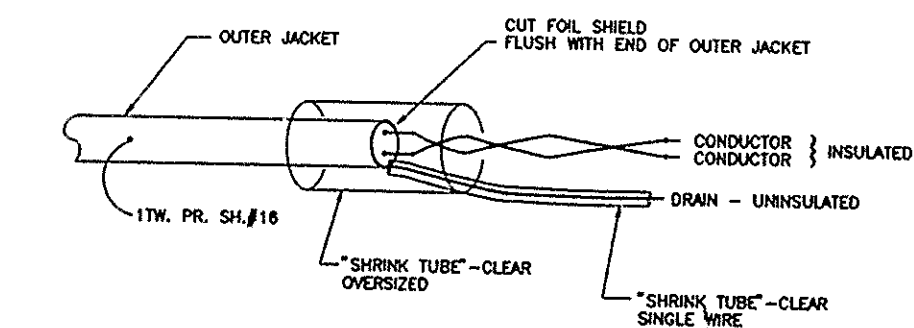


TYPICAL HVAC UNIT
WIRING DIAGRAM



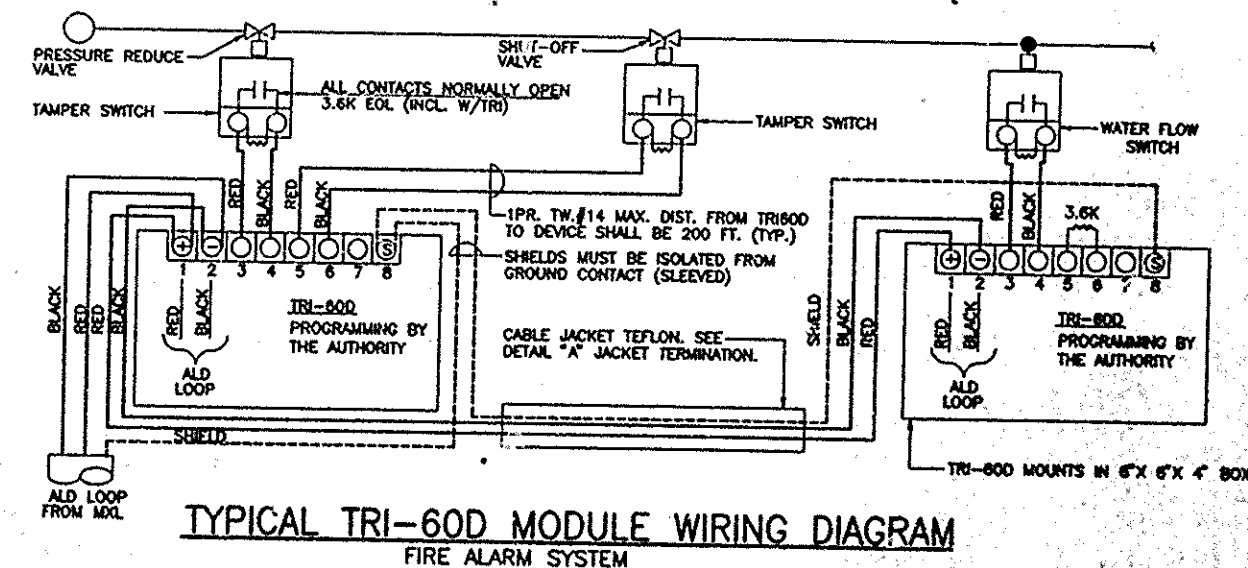
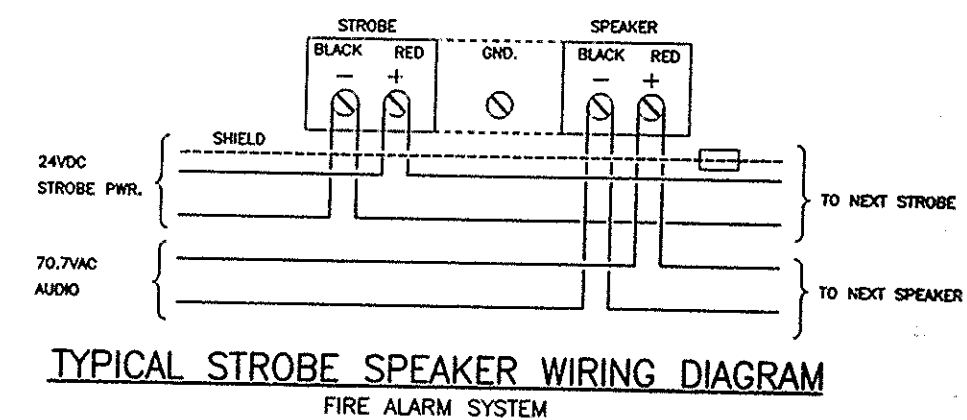
DETAIL "A" - TYPICAL SHIELD/DRAIN INSULATING METHOD
FIRE ALARM SYSTEM

NOTES

- FOR LEGEND SEE DWG. #E-1, FOR GENERAL NOTES, ABBREVIATIONS AND LIGHTING FIXTURE SCHEDULE SEE DWG. #E-2.
- FOR EXACT LOCATION OF DUCT SMOKE DETECTORS IN HVAC UNITS SEE MECHANICAL DRAWINGS.
- FOR EXACT LOCATION OF ACS FAN DELUGE SOLENOID VALVE SEE PLUMBING AND SPRINKLER DRAWINGS.
- FOR FIRE ALARM WIRING DIAGRAM SEE DWG. #E-20, E-34, E-48, E-62, E-77 AND E-92.
- FOR SEQUENCE OF OPERATION OF MECHANICAL EQUIPMENT SEE DWG. #M-5 AND #M-6.
- ALL HVAC SYSTEM CONTROL CONDUIT AND WIRES SHALL BE FURNISHED AND INSTALLED UNDER DIVISION 15.
- ALL FIRE ALARM WIRING SHALL BE TESTED AS PER SPECIFICATION.
- PROVIDE NAMEPLATE FOR TR-60R BOX. NAMEPLATE SHALL BE 1" X 3" BLACK PLASTIC ENGRAVED WITH 1/4" HIGH WHITE LETTERING AS FOLLOWS: "FIRE ALARM SHUTDOWN CONTACTS"
- PROVIDE NAMEPLATE FOR TR-60D BOX. NAMEPLATE SHALL BE 1" X 3" BLACK PLASTIC ENGRAVED WITH 1/4" HIGH WHITE LETTERING AS FOLLOWS: "FIRE ALARM"
- ALL FIRE ALARM SYSTEM PROGRAMMING WILL BE PERFORMED BY THE AUTHORITY.
- CONNECT DELUGE SOLENOID VALVE TO MODULE "CSM-4" IN EXISTING FIRE ALARM PANEL "MXL".

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF ONE OF THE CONTRACT DRAWINGS CONSTITUTING A PART OF CONTRACT NO. WTC-802.071 IN THE FORM IN WHICH SAID DRAWINGS EXISTED AT THE TIME THE SAID CONTRACT WAS EXECUTED BY THE PARTIES.

DATE 6/21/95 Sultan A. Aslam
SPEC. WRITER
DATE 8/5/95 Peter K. Sweeney
ENGINEER OF DESIGN



TYPICAL TRI-60D MODULE WIRING DIAGRAM
FIRE ALARM SYSTEM

THE PORT AUTHORITY
OF NY & NJ

John K. Sweeney
ENGINEERING PROGRAM MANAGER
WORLD TRADE CENTER
S. P. Sweeney
CHIEF ELECTRICAL ENGINEER

Engineering Department
Design Divisions

The World Trade
Center
Electrical/HVAC
Upgrade Program

Title
TOWER ONE AND TWO
LOW VOLTAGE
SUBSTATIONS
CONSTRUCTION AND
INSTALLATION

ELECTRICAL
TYPICAL
HVAC CONTROL
WIRING DIAGRAMS AND
FIRE ALARM DETAILS

No. Date Revision Approval
This drawing subject to conditions in contract. All inventions, designs and methods herein are reserved to Port Authority and may not be used without its written consent.
ROYZMAN FISCHER ROYZMAN A.S.
Designed by Drawn by Checked by
Date 6-1-95 Scale NONE
Contract Number Drawing Number
WTC 802.071 E-108